Frequently Asked Questions and Answers about the Calcasieu Estuary
Lake Charles, Louisiana
August 1999

Questions are grouped into the following categories: Superfund, Drinking Water and Ground water, Air, Health, Mossville, Fisherville, Calcasieu Parish, and State and Federal.

Superfund

1. Regarding the cleanup of the North Ryan Street Superfund Site in Lake Charles, the community wants the contaminated on-site soils and river sediments excavated and removed, not left on-site or in the Calcasieu River. What progress has been made toward a cleanup decision?
Is the State participating or providing oversight?

> After proposing the feasible cleanup alternatives and considering the stated community concerns, the U.S. Environmental Protection Agency made a decision in June 1999 for the North Ryan Street Superfund Site. The U.S. Environmental Protection Agency decision includes the following two components: (1) In situ thermal treatment will be used on-site for the contaminated soils; if the required treatment levels cannot be met, the on-site contaminated soils will be excavated and disposed off-site at an appropriate facility; and (2) Contaminated sediment in the Calcasieu River will be dredged and disposed off-site at an appropriate facility.

2. What has the U.S. Environmental Protection Agency done to ensure that the private wells along River Road in proximity to the North Ryan Street Superfund Site are not contaminated?

> After learning of the community's concern, the U.S. Environmental Protection Agency arranged to have the 21 private water wells along River Road tested. The sampling parameters included volatile organic compounds, polynuclear aromatic hydrocarbons, polychlorinated biphenyls, pesticides, cyanide, dioxin, and metals including mercury. The samples were analyzed and nothing of concern was found demonstrating that the private wells clearly meet the standards established for public drinking water supplies.

3. Is the U.S. Environmental Protection Agency investigating the ground water associated with the North Ryan Superfund Site?

> An investigation and study of ground water are underway. If contamination is found, it will be addressed as part of the North Ryan ground water response action.

4. How does the U.S. Environmental Protection Agency plan to proceed with the Calcasieu Estuary cleanup under Superfund? What part of the Estuary will be included?

The U.S. Environmental Protection Agency will focus an investigation on the contaminated sediments in the Calcasieu Estuary. Field testing is scheduled to begin in the fall of 1999. Conduct of human health and ecological risk assessments are scheduled to begin before the end of 1999. While the time required for completion of these activities varies, the U.S. Environmental Protection Agency anticipates the investigation and development of feasible alternatives will take at least two years due to the size and complexity of the project.

The area in the Calcasieu Estuary that will be addressed by the investigation starts at the salt water barrier and includes Bayou Verdine, Coon Island Loop, Clooney Island Loop, Bayou d'Inde, Bayou Olsen, and the Calcasieu River to the north end of Moss Lake.

5. How will it be possible to clean up the estuary?

A major objective of U.S. Environmental Protection Agency's estuary study is to determine if a cleanup is necessary. As a part of the investigation, the U.S. Environmental Protection Agency will evaluate feasible cleanup options. Possible options include dredging the sediments, capping the sediments, or allowing the estuary to recover naturally.

6. How will the U.S. Environmental Protection Agency involve the community in its Superfund investigation of the Calcasieu Estuary?

The U.S. Environmental Protection Agency will hold quarterly meetings in Lake Charles to discuss the project status. The first community meeting was held on June 10, 1999, in Lake Charles. Bulletins and fact sheets will be used to update community members and solicit comments, as appropriate. To improve information access, the U.S. Environmental Protection Agency has information about its Superfund Calcasieu Estuary Project on the Internet at http://www.epa.gov/region6/superfund.

7. When will the cleanup be done?

As the investigation is estimated to take at least two years, any necessary cleanup actions would not begin before 2001. If, however, any significant problems are identified during the investigation, the U.S. Environmental Protection Agency would deal with those issues immediately rather than at the conclusion of the total study.

8. Why is more study needed when there are numerous reports and studies available documenting contamination and principally responsible parties?

Previous studies and data were not necessarily designed to determine the extent of sediment contamination, evaluate human health and ecological risks, and assess feasible cleanup options for the whole estuary. The U.S. Environmental Protection Agency project will consider all available data and reports in its investigation.

9. What guarantees U.S. Environmental Protection Agency will do something now to clean up the estuary?

The U.S. Environmental Protection Agency has committed resources to do a comprehensive investigation and to have continuing dialogue with the community.

10. Do the taxpayers or the industries pay for the estuary cleanup?

The U.S. Environmental Protection Agency is using the Superfund Trust Fund to pay for the investigation of the contaminated sediments in the Calcasieu Estuary. Monies for this Trust Fund come from a tax imposed on industries such as petrochemicals. The Superfund law requires the polluter to pay for the investigation. Since the Trust Fund is being used to pay for the investigation, the U.S. Environmental Protection Agency has the authority to seek the repayment of appropriate expenses from responsible parties. If the investigation determines that a cleanup is ultimately needed, the responsible parties will have the opportunity to carry it out under federally enforceable agreements.

11. What qualifies a facility to become a Superfund Site?

A site is evaluated using the Superfund Hazard Ranking System, a numeric ranking process. If the site scores 28.5 or greater, it may be included on the National Priorities List.

12. If a community becomes a Superfund site, does that mean that people have to relocate?

No. Of the 1,400 Superfund sites nation wide, permanent relocation of residents was needed in only 22 cases over the past 20 years.

13. Does the U.S. Environmental Protection Agency plan to investigate the Cypress Estate neighborhood at the end of Country Club Road in Lake Charles? This was previously a city dump.

No. The U.S. Environmental Protection Agency has no plans to investigate the Cypress Estate neighborhood as part of the estuary study. However, if there is information that hazardous substances were placed in this city dump, please contact Ms. Susan Webster, U.S. Environmental Protection Agency Site Assessment Team Leader, at 1-800-887-6063, extension 6784.

14. Since local industries have not been forthright in the past, why would the U.S. Environmental Protection Agency allow them to provide information in the future?

Information used by the U.S. Environmental Protection Agency must be accurate. As such, the U.S. Environmental Protection Agency assesses the accuracy and validity of all data it uses regardless of its source.

Drinking Water and Ground Water

15. Mercury is already in the Lake Charles water supply at levels that could cause health effects in children. What is the U.S. Environmental Protection Agency doing about this?

The U.S. Environmental Protection Agency data shows no mercury contamination in excess of the National Primary Drinking Water Standard maximum concentration levels of two parts per billion for the Lake Charles Public Water System or any other public water system in the Calcasieu Parish. The Louisiana Department of Health and Hospitals sampled the 13 ground water wells that make up the Lake Charles' public water system in May and July of 1998 for mercury. Mercury was not detected in any of these samples.

16. Community members are concerned about the safety of the public water supplies in light of ground water contamination by organic chemicals at several chemical plants. What does the U.S. Environmental Protection Agency know about the quality of these water supplies?

Testing of the public water supply by the Louisiana Department of Health and Hospitals in 1998 showed no signs of organic chemicals in the 500-foot sands of the Chicot Aquifer, the primary source of the public water supply in and around the Lake Charles' area. Data show that ground water contamination is confined to the upper and 200-foot sands of the Chicot Aquifer. Specific testing of the Mossville public water system in May 1998 by the U.S., Environmental Protection Agency confirms that the 500-foot sands of the Chicot Aquifer are not contaminated.

17. What is the U.S. Environmental Protection Agency going to do about the contaminated ground water in the Calcasieu Parish? Will the U.S. Environmental Protection Agency test any private drinking water wells in conjunction with its routine public water supply testing in light of the concerns raised by the communities in the Calcasieu Parish? What will be done if the private wells are found to be contaminated?

In response to community concerns, the U.S. Environmental Protection Agency is funding the Louisiana Department of Health and Hospitals to increase the frequency of monitoring at certain public water systems and private wells in the Calcasieu Parish. Starting in the summer of 1999, sampling for volatile organic compounds, ethylene dichloride, and ethylene dibromide will be conducted on an annual basis as opposed to the former triennial schedule. This sampling will include dioxin and dioxin-like compounds at the Mossville public water system. In addition, the U.S. Environmental Protection Agency has reviewed the files of all Resource Conservation and Recovery Act permitted treatment, storage, and disposal facilities in the area with documented or known releases to ground water to determine the nature of ground water contamination and the current state of corrective action at those facilities. The U.S. Environmental Protection Agency will work with both the regulated community and Louisiana Department of Environmental Quality to ensure that corrective actions at these and other area facilities are

conducted in a timely fashion and remain protective of human health and the environment with particular attention given to ground water releases with the potential to be off-site or near a potential drinking water supply.

18. How does the Safe Drinking Water Act address contamination?

The Safe Drinking Water Act mandates the testing of public water supplies for volatile organic compounds once every three years, establishes drinking water standards, authorizes penalties for violations, and requires that water customers receive Consumer Confidence Reports that describe their drinking water quality.

19. Will the U.S. Environmental Protection Agency test any private wells? How do I get my well tested?

The U.S. Environmental Protection Agency will identify private wells that are located near known ground water contamination sources and evaluate the need for testing at these wells. Private well owners interested in having their well considered for this testing should contact Kathy Landry, President of CLEAN.

20. Didn't the National Oceanic and Atmospheric Agency do a study that addressed ground water contamination to a point where it could be a kick-off point?

Ground water was not assessed in this report. The National Oceanic and Atmospheric Agency report compiled existing sediment, water, and fish tissue information in order to determine if there was evidence to support moving forward to assess injury to the National Oceanic and Atmospheric Agency trust resources.

21. How can you prove to people that their water is not contaminated, especially residents in areas of known contamination like Mossville, Fisherville, and Bayou d'Inde? And, if the water isn't currently contaminated, how can you ensure it doesn't become contaminated in the future?

There is no data available to suggest that the public drinking water supplies are contaminated in the referenced cities or in other areas of Lake Charles. While data shows there is limited ground water contamination in the shallow zones of the Chicot Aquifer, these zones do not serve as public drinking water supplies. To prevent future contamination, the U.S. Environmental Protection Agency has increased the testing frequency of public water systems, will designate some private wells for testing, and will closely monitor the contamination in the shallow zones for possible migration to other areas.

22. The majority of the private wells in southwest Lake Charles are in the 200-foot zone. Will this zone be tested as it has been shown to be contaminated? What about testing of private wells like those in South Lake Charles? Are there any plans for further studies in the 200-foot sand around Lake Charles?

Although testing of private wells is the responsibility of the well owner, the U.S. Environmental Protection Agency will identify private wells that are located near known ground water contamination sources and evaluate the need for testing at these wells. Private well owners should contact CLEAN President Kathy Landry if they would like their wells considered for testing. Twenty-one private wells on River Road and adjacent to the North Ryan Street Superfund Site were sampled in May 1999 as a result of community concerns. Regarding studies of the 200-foot sands, site-specific ground water sampling and chemical analysis will be done to delineate the horizontal and vertical extent of contamination at the Resource Conservation and Recovery Act permitted facilities with identified ground water contamination

23. What are the likely cumulative impacts of all the contamination in the aquifer on drinking water quality?

No contamination has been found in the 500 foot sands of the Chicot Aquifer, the public water supply. State and Federal oversight of ground water cleanup and monitoring will continue to ensure that the 500 foot sands of the Chicot Aquifer are protected.

24. Where are the six wells in Calcasieu Parish that Louisiana Department Environmental Quality will test first?

The six public wells that Louisiana Department of Environmental Quality plans to test this year in Calcasieu Parish are installed in the Chicot Aquifer. The Louisiana Department of Environmental Quality will choose six wells from the following seven: (1) CU-771, (2) CU-869, (3) CU-1319, (4) CU-1060, (5) CU-1023, (6) CU-1365, and (7) CU-699. Locations of these wells can be acquired from the State by contacting Mr. Howard Fielding at (225) 765-0578.

25. Has the well at Mike Cooks (sic-Hook's) Road Marina been shut down? It is a 180-foot sands well and is used for boat drinking water.

No. This private well was tested by Louisiana Department of Environmental Quality in 1998, and no contamination was detected.

26. The U.S. Environmental Protection Agency won't have its proposal for the Safe Drinking Water Act's Source Water Assessment Program until 2003. Do you realize how many people can die by then? Why does it take 4-5 years for this information?

The drinking water in Calcasieu Parish meets all national drinking water standards and is safe to drink. Public water systems in the Calcasieu Parish will have their assessments completed well before 2003. Many public water systems that use ground water as a source already have the essentials of a source water assessment program completed under the Wellhead Protection Program. Lake Charles and Mossville public water systems both have approved Wellhead

Protection Programs in place. To get information on either of these programs, contact Mr. Howard Fielding at the Louisiana Department of Environmental Quality at (225) 765-0578.

27. What industries are required to monitor ground water for contamination? Where is it being monitored? How often? Who makes these decisions?

Industries that treat, store, and dispose of hazardous wastes are required to monitor for ground water contamination in accordance with permits or enforcement orders. There are 19 facilities in the Lake Charles/Westlake/Sulphur areas that are conducting ground water monitoring for Louisiana Department of Environmental Quality. Monitoring frequency is proposed by the industries and approved by Louisiana Department of Environmental Quality. Industries such as CONDEA-Vista and PPG Industries, Inc. have monitoring wells to determine rates of recovery and containment of ethylene dichloride ground water contamination. Conoco at Westlake has ground water monitoring wells at the refinery and at the Docks ethylene dichloride spill site. CITGO also has ground water monitoring wells. Union Pacific has installed ground water monitoring wells near the railcar switching facility in Fisherville. For more information about monitoring, contact Ms. Ellen Broussard at (318) 475-8644 at the Louisiana Department of Environmental Quality, Lake Charles Office.

28. Is U.S. Environmental Protection Agency providing any safeguard to rice farmers whose irrigation wells draw water from a shallow zone?

Irrigation wells fall under the Louisiana Department of Transportation. The U.S. Environmental Protection Agency's review of current data revealed nothing to suggest that contamination from PPG, CONDEA-Vista, and the Conoco Docks area will travel eastwards and reach the shallow ground water irrigation pumping wells in Iowa, Louisiana.

29. Once it is determined which and how much contaminants exist in the drinking water supply, what steps are going to be taken to remove these contaminants? Who is responsible for this action? How long will this process take, is it even possible, or do these drinking water supplies have to be abandoned?

While no contamination of the drinking water supplies has occurred, if contamination is determined at some future time, the following steps will be taken: (1) Notification of the residents; (2) Treatment of the contaminated water to drinkable standards or supply a different drinking water source; (3) Containment of the contaminant plumes to minimize further spreading; and (4) Remediation of the ground water. The State and Federal agencies would work together to ensure that these actions were taken so that public health was not threatened. Ground water remediation is generally a costly and long-term process.

30. What will be the alternate source of drinking water when the contamination reaches the 500- foot sands of the Chicot Aquifer?

It is not certain that any contamination will ever reach the 500-foot sands. If the 500-foot sands of the Chicot Aquifer are ever found to be contaminated, alternate sources of drinking water include the 700 foot sands of the Chicot Aquifer, the deeper Evangeline Aquifer, surface water sources in the Parish, or bottled water.

31. How can you say Lake Charles is not different from other cities when there is no other city with 53 industries in such a small area with so many known sources of ground water and aquifer contamination?

Lake Charles clearly has unique properties. However, in order to proceed with the best plan of action, it is important to examine examples of successful ground water investigations and cleanups where the setting is similar to that of Lake Charles. The hydro stratigraphy and Chicot aquifer system beneath Lake Charles extends across much of southwestern Louisiana and, as such, is similar to what underlies other cities and industrialized-urban areas of the State.

32. Why would the U.S. Environmental Protection Agency wait until the Lake Charles drinking water is poisoned before it starts cleaning up the ground water contamination?

The U.S. Environmental Protection Agency is not waiting. Ground water cleanups are occurring now at several Lake Charles' industries to include PPG, Conoco Docks area, Fisherville rail yard, and CONDEA-Vista. In addition, permitting requirements are currently in place for corrective action at all seven facilities in Lake Charles operating under Resource Conservation and Recovery Act permits.

33. How long will it take before cleanup will occur at the several ethylene dichloride ground water contamination sites? How many more studies of the area water quality are needed before you begin the cleanup?

Studies are underway to find the horizontal and vertical extent of the ethylene dichloride plume, select the best cleanup technology, and design the system. Ground water cleanups are now in progress at PPG Industries, Inc., the Conoco Docks area, and CONDEA-Vista. PPG and Conoco have installed ground water recovery systems to remove ethylene dichloride from ground water. CONDEA-Vista has installed a pilot recovery system within its VCM facility area. While the pilot system is extracting some ethylene dichloride contamination now, it also provides engineering data that will be used in the design of the full scale system. While it is difficult to predict how long each project will take, generally ground water cleanups can take 30 years or more in a highly contaminated area.

34. What steps can U.S. Environmental Protection Agency take to protect the Chicot Aquifer?

The U.S. Environmental Protection Agency provides funding to Louisiana Department of Environmental Quality to protect all aquifers in the State of Louisiana to include the Chicot Aquifer. The U.S. Environmental Protection Agency works with Louisiana Department of Environmental Quality on projects that help protect the Chicot Aquifer such as the Wellhead

Protection Program. The U.S. Environmental Protection Agency also works with the Louisiana Department of Environmental Quality during the Resource Conservation and Recovery Act permitting process to ensure that the waste units at facilities are designed to protect ground water. In the event that contamination does occur, permit provisions would require that the facility implement remedial actions such as pump and treat, barrier wall containment systems, and natural attenuation.

35. Has the U.S. Environmental Protection Agency tested Waterworks District 9, Ward 4?

Waterworks District 9, Ward 4 was tested for chemical contaminants in 1998, and the water was determined to be safe to drink.

36. What is the strategy to protect the Chicot Aquifer?

The 500-foot sands of the Chicot Aquifer are protected through the Wellhead Protection Program and the Source Water Assessment Program. To ensure its continued integrity, the Louisiana Department of Environmental Quality actively monitors the aquifer's water quality on a regular basis. The Resource Conservation and Recovery Act provides for permitting, enforcement, and corrective action to include ground water remediation if needed. For specific information on the aquifer monitoring schedule, contact Ms. Ellen Broussard of the Louisiana Department of Environmental Quality, Lake Charles Office at (318) 475-8644. For more specific information, refer to the report by McNeese University entitled, "Aquifer Management Strategy for The Chicot Aquifer System, Final Report to Louisiana Board of Regents, LEQSF (86-89)-RD-D-12," submitted by McNeese State University, November 1990.

37. Is it possible to filter volatile organic compounds from drinking water?

No, volatile organic compounds cannot be removed by filtration. Volatile organic compounds can be removed from drinking water by aeration and adsorption using activated carbon.

38. Will U.S. Environmental Protection Agency allow new discharges into the estuary before cleaning up the existing pollution?

Neither the U.S. Environmental Protection Agency nor the Louisiana Department of Environmental Quality is inclined to disallow new discharges. It is anticipated that new applications for discharge permits will be reviewed and processed according to standard procedures.

39. What year will you test for volatile organic compounds?

All Calcasieu Parish public water systems were tested for volatile organic compounds in 1998, and no exceedences of drinking water standards were detected. A subset of these public water

systems will again be tested during the summer of 1999 based on well proximity to known ground water contamination and susceptibility to contamination.

40. Can ethylene dichloride eat through the clay layer? Do the salt domes rupture the clay so that ethylene dichloride seeps through?

Theoretically, very high concentrations of ethylene dichloride could dehydrate the clay and cause cracks to develop. The ethylene dichloride could then move along the cracks through the clay. While there are natural cracks in the clay in Lake Charles, the massive thickness of the clays may force ethylene dichloride to pool above the clay layer for some time and not result in fast moving ethylene dichloride seeps. Salt domes do occur near PPG Industries, but they are much deeper than the 700-foot aquifer and are not expected to cause any cracks in the clays above the 700-foot aquifer.

41. Is there a U.S. Environmental Protection Agency Web site for all of the monitoring data?

Monitoring data is available at http://www.epa.gov/ogwdw/dwinfo.htm. This data base, known as Envirofacts, contains all Safe Drinking Water Act violations for all public water systems in the United States.

Air

42. Can the U.S. Environmental Protection Agency fund the Lake Charles Bucket Brigade effort?
The U.S. Environmental Protection Agency provided $50,000 to the Bucket Brigade, $25,000 as in-kind services and $25,000 for laboratory analytical services.

43. What is the process for the U.S. Environmental Protection Agency to add toxic constituents to the Federal air regulation standards?

Citizens may petition U.S. Environmental Protection Agency under authority of §112(b)(3)(A) of the Clean Air Act to add air standards, and the U.S. Environmental Protection Agency will consider the request.

44. How does air pollution affect ground water?

While air emissions are not a significant source of ground water contamination, air contaminants can and do come in contact with water bodies. This happens by direct contact by air or by the scrubbing effects of rainfall. When this happens, the air pollutants carried in the water body can migrate down to ground water. This can result from improper waste disposal, leaking storage tanks, and pesticide application.

45. Ten air samples taken at CONDEA-Vista have shown high levels of air toxics proving exposure over time and cumulative impacts. When will U.S. Environmental Protection Agency enforce the Clean Air Act and consider cumulative impact in permitting decisions?

The U.S. Environmental Protection Agency and Louisiana Department of Environmental Quality are performing modeling to better evaluate cumulative risk from air emissions. In response to a Petition brought under Section 21 of the Toxic Substances and Control Act, U.S. Environmental Protection Agency committed to develop and implement a model, the Chicago Cumulative Risk Initiative, for assessing cumulative risk of pollutants from multiple sources of air pollution. This and similar efforts are expected to produce more efficient tools to help U.S. Environmental Protection Agency and the state evaluate cumulative risks.

As a result of the smoking flare incidents at CONDEA-Vista, the U.S. Environmental Protection Agency conducted an air inspection at the CONDEA-Vista facility in March 1999. Incidents of further smoking flares should be reported to Mr. Gerald Quarles, Louisiana Department of Environmental Quality Air Quality Coordinator, Southwest Regional Office, at (318) 475-8644. Air sampling data may be sent to Mr. Samuel Coleman (6EN), Director of the Compliance Assurance and Enforcement Division, U.S. Environmental Protection Agency, 1445 Ross Ave., Dallas, Texas 75202.

Health

46. Will the U.S. Environmental Protection Agency address the health problems that are occurring in the Calcasieu Parish?

The responsibility for doing health studies lies with the Agency for Toxic Substances and Disease Registry. The Agency for Toxic Substances and Disease Registry issued a public health consultation on October 16, 1998, for the Calcasieu Parish. The data reviewed by the consultation indicated that some residents had blood dioxin levels that exceeded the background reference ranges. In response to these findings, Agency for Toxic Substances and Disease Registry conducted an Exposure Investigation in the community of Mossville on December 15, 1998. Samples collected included 28 blood, two chicken eggs, four soil, and one breast milk. Results showed that twelve people out of the 28 longtime Mossville residents tested had dioxin levels above the average. In response, a multi-agency work group was assembled to address the health concerns of Mossville residents. The Louisiana Department of Environmental Quality, the Louisiana Department of Health and Hospitals, and the U.S. Environmental Protection Agency are involved with this work group to find the possible sources of dioxin.

47. How do you expect poor folks to eat fish and not expose themselves to contamination?

The current advisories for the Calcasieu River and Bayou d'Inde provide guidance for the safe consumption of recreational fishing in those areas. There is a fish consumption advisory for Bayou d'Inde, which recommends limiting fish and seafood consumption to two meals per month. An informational advisory for fish contaminated with hexachlorobenzene, hexachloro-1,3-butadiene, and polychlorinated biphenyls is in place for the Calcasieu River. No restrictions regarding fish consumption have been put in place in the Calcasieu River. The Louisiana Department of Health and Hospitals will continue to review all available and new data and update advisories as needed.

48. Who catches the fish that are tested for chemicals in the estuary?

The fish tissue samples are taken by PPG Industries Inc.'s contractor. The Louisiana Department of Environmental Quality began the program in 1988. PPG has since taken it over and continues the work today.

49. When will we get the dioxin results from Agency for Toxic Substances and Disease Registry?

The Agency for Toxic Substances and Disease Registry provided dioxin results with individual participants, and a summary of the overall results were provided to the Mossville community on April 14, 1999.

50. What are the long-term implications and effects on human health from contaminated ground water in the Calcasieu Estuary?

Based on current information, the public water supplies are not contaminated and are safe. To ensure long-term protection of the ground water and the whole Calcasieu Estuary, the U.S. Environmental Protection Agency plans to increase monitoring of the public water supplies, sample some private wells in areas of shallow contamination, sample fish tissue, and investigate the extent of contamination in the Calcasieu Estuary sediment.

Mossville

51. What does the U.S. Environmental Protection Agency know about the spill and clean up in Mossville from the CONDEA-Vista tank leak and the resulting ethylene dichloride in ground water? Has the spill impacted the drinking water?

Ethylene dichloride contained in CONDEA-Vista surface impoundments and from spills in the process area has infiltrated into the subsurface and contaminated shallow ground water in the upper Chicot Aquifer. The ethylene dichloride contamination has reached the 80-foot water bearing sand, and analyses of wells in the 200-foot zone have not detected any contamination.

The U.S. Environmental Protection Agency is working with the Louisiana Department of Environmental Quality and CONDEA Vista to accelerate removal of ethylene dichloride from the ground water before it infiltrates into the 200-foot and 500-foot Chicot Aquifers. The concentration of ethylene dichloride in the 25-foot zone in Mossville is significantly lower than the concentration of ethylene dichloride at CONDEA-Vista, therefore, recovery of ethylene dichloride will begin on-site in an effort to reduce the source of the contamination. Investigations will determine the off-site extent of contamination and evaluate the need for additional recovery systems in other areas to include the existing plume in the Mossville community.

Ethylene dichloride has not been detected in the Mossville Water System. The Mossville water supply comes from two water wells installed in the 500-foot Chicot Aquifer. Water from the wells has been tested periodically and, to date, contaminants have not been detected. Hydraulic gradients created in part by the CONDEA-Vista wells tend to move the contamination in the shallow zone away from the public supply well, not toward it. Consequently, in the 500-foot Chicot Aquifer underneath Mossville, the ground water flows away from Mossville and toward the CONDEA-Vista facility thereby providing additional protection from possible contamination.

52. What if unknown geologic or manmade features short circuit the projected ground water pathway to the Mossville water supply wells?

The U.S. Environmental Protection Agency will conduct further research regarding the unknown geologic and manmade features. These defects may include unplugged abandoned water wells or oil exploration bore holes. If they are present, such bore holes may act as preferential pathways for ethylene dichloride to travel vertically downwards.

53. Why does CONDEA-Vista have recovery wells only at 50 feet when there is ethylene dichloride detected at 200 feet?

Recovery wells are installed to the greatest depth at which a contaminant has been found to have migrated. CONDEA-Vista has recovery wells at the 10, 25, 50, and 80-foot depths. While CONDEA-Vista initially reported small concentrations of ethylene dichloride at 200 feet, retests did not detect ethylene dichloride. This one-time detection of ethylene dichloride at 200 feet was attributed to contamination introduced accidentally by drilling equipment and not to plume migration from surface contamination. Since ethylene dichloride has not been found at 200 feet, CONDEA-Vista's deepest well is at 80 feet.

54. Have enforcement actions been taken against CONOCO/CONDEA VISTA for gross under reporting of the ethylene dichloride spill in 1994? If not, are any actions planned?

The U.S. Environmental Protection Agency conducted an initial investigation of the spill. Subsequent actions relating to the spill were executed by Louisiana Department of

Environmental Quality. The analysis of the environmental data from the 1994 spill is part of the U.S. Environmental Protection Agency's continuing enforcement responsibilities in the Calcasieu Basin.

55. Is the Mossville Public Water System safe? Has dioxin been measured in the Mossville Public Water System?

The Mossville Public Water System is safe and is not a source of dioxin exposure. On May 27, 1999, the Mossville Public Water System was sampled for dioxin by the Louisiana Department of Health and Hospitals. The sampling was done in response to the Agency for Toxic Substances and Disease Registry's blood survey which found elevated levels of dioxin in the blood of several Mossville residents. Dioxin, tested as 2,3,7,8-TCDD, was not detected. Sixteen other dioxin-like compounds not regulated by the Safe Drinking Water Act were also tested. The results on the dioxin-like compounds were similar to the results of a sample of ultra-pure de-ionized water.

56. Is Mossville drinking water contaminated?

No, the public drinking water supply in Mossville is not contaminated. The Mossville water wells are screened at the 500 foot sands of the Chicot Aquifer. No chemical contamination has been found in any Calcasieu Parish public water systems. This includes 104 public water systems which were tested for 84 contaminants. Volatile organic compounds, ethylene dichloride, and ethylene dibromide were not detected in recent samples. Since volatile organic compounds move faster than most groups of constituents in ground water, it is very unlikely that any other group of contaminants, such as synthetic organic compounds, metals, pesticides, dioxin and related congeners, has reached the 500 foot sands of the Chicot Aquifer.

57. When was the last testing of Mossville water for chemical contaminants? Why are we unable to get this information from Louisiana Department of Health and Hospitals? Whom do we contact for the latest testing?

The last testing of the Mossville public water system was done by U.S. Environmental Protection Agency in May 1998 and most recently in June 1999. Information about the quality of the Mossville's public water supply can be obtained from the Louisiana Department of Health and Hospitals Office by calling (318) 491-2040.

58. Who is responsible for testing public water systems and what compounds are tested for?

The Louisiana Department of Health and Hospitals is the state agency responsible for implementation of the Safe Drinking Water Act in Louisiana. The Safe Drinking Water Act requires community public water systems to test for 22 volatile organic compounds.

59. Is CONDEA-Vista monitoring and removing ethylene dichloride? The off-site monitoring wells are not being used. They appear to be rusted in place, and weeds have grown up around them.

CONDEA-Vista is monitoring ethylene dichloride. The ground water monitoring wells are installed on its property at 10-foot, 25-foot, 50-foot, and 80-foot depths to correspond to shallow ground water saturated sands. A ground water monitoring well is also located at the 200-foot depth to monitor the 200-foot Chicot Aquifer. Off-site monitoring wells were installed in the East Mossville Community west of VCM Road. All CONDEA-Vista wells are sampled annually for volatile organic compounds. Some wells are sampled semiannually for other water quality parameters. Regarding recovery of ethylene dichloride from ground water, CONDEA-Vista has installed recovery wells on-site east of VCM Road at 10-foot, 25-foot, 50-foot, and 80-foot depths. For more information on the CONDEA-Vista monitoring requirements, contact Ms. Ellen Broussard with the Louisiana Department of Environmental Quality Lake Charles office at (318) 475-8644.

By design, wellheads stick up above the ground and may rust from exposure to the elements; however, the wells are operable as long as they are not rusting below ground.

60. What can be done when the Louisiana Department of Health and Hospitals testing is two to three years behind for Mossville?

Mossville's public water system has been meeting all of the scheduled sampling requirements regulated by the Safe Drinking Water Act. The U.S. Environmental Protection Agency tested this system independently in May 1998. There were no detections of volatile organic compounds, ethylene dichloride, or ethylene dibromide in the samples. This system will be sampled annually for volatile organic compounds to ensure that any contamination that may possibly reach the 500 foot sands of the Chicot Aquifer is detected and responded to quickly. This information will be available to the public via Consumer Confidence Reports by October 19, 1999.

61. Why wasn't the soil tested for ethylene dichloride when CONDEA-Vista did any digging in Mossville or Westlake?

CONDEA-Vista conducted both soil and ground water testing to determine how deep the ethylene dichloride contamination migrated. Ethylene dichloride was found at 10, 25, 50, and 80-foot depths. CONDEA-Vista mapped the ethylene dichloride contamination plumes in 1995 at these depths within the VCM plant area and off-site in the east Mossville Community.

62. Why is CONDEA-Vista allowed to pump water from the 500 foot sands when there is a high risk of contaminating the 500 foot sands?

CONDEA-Vista pumps water from the 500-foot sands for use in its chemical process operations. The U.S. Environmental Protection Agency has no authority to prevent this pumping and water use because Louisiana water rights law allows CONDEA-Vista to pump water from the aquifer located underneath its property.

63. When will the drinking waters in Mossville be tested for chemicals and bacteria? When can the community have current results?

The Mossville public water system was tested in 1998. The U.S. Environmental Protection Agency further tested the Mossville public water system in 1998 for volatile organic compounds, ethylene dichloride and ethylene dibromide. This system is tested monthly for total coliform bacteria. All drinking water violation data can be accessed through the Internet at URL http://www.epa.gov/ogwdw/dwinfo.htm.

64. What is the status of Mossville water now? The ethylene dichloride spill & possible spread of the ethylene dichloride is a concern for the residents left in Mossville.

The Mossville public water supply is safe to drink. Ethylene dichloride has been measured in monitoring wells at 80 feet deep. The U.S. Environmental Protection Agency and Louisiana Department of Environmental Quality are reviewing available data and the hydro geologic factors to determine if the ethylene dichloride has spread further than the East Mossville Community near the VCM and Old Spanish Trail Road. Any new information or changes in the Mossville water status will be made available to the community.

65. How long will it take ethylene dichloride to reach the 500-foot Chicot aquifer?

If no measures are taken to contain the spread of ethylene dichloride from the 80-foot sands, U.S. Environmental Protection Agency estimates it would take about 173 years for ethylene dichloride to reach the two public water supply wells located in West Mossville.

66. Will U.S. Environmental Protection Agency take tap water samples inside homes in Mossville and Westlake to detect whether chemicals, ethylene dichloride, or any other carcinogens are present?

The Safe Drinking Water Act requires that drinking water be tested regularly at the entry point to the water distribution system at public water systems for more than 84 contaminants to include metals, synthetic organic compounds, volatile organic compounds, pesticides, and microbial contaminants. Samples are collected in the distribution system at selected locations for microbial contamination and at various taps for lead and copper. The location of these samples is determined by Louisiana Department of Health and Hospitals engineers so that representative samples can be collected and evaluated. As a precautionary measure, additional sampling as a cautionary measure will be funded by U.S. Environmental Protection Agency at sites that may be more susceptible to contaminants based on their proximity to contaminated ground water. Certain private drinking water wells that fit the same criteria may also be sampled to determine whether ethylene dichloride or other contaminants are present.

67. Why are Mossville people allowed to continue to live on contamination? It is known that an ethylene dichloride spill contaminated the ground water. If it affected the workers in the plant surely it affects people who live near the plant?

The U.S. Environmental Protection Agency knows that ethylene dichloride has traveled approximately 80 feet beneath CONDEA-Vista, VCM plant, and East Mossville subdivision. Recent testing done by Louisiana Department of Health and Hospitals and U.S. Environmental Protection Agency shows that the Mossville drinking water is safe, and the community is not being exposed to any harmful contaminants through its public water supply.

68. It has been reported that ethylene dichloride leaked into the ground water from PPG and CONDEA-Vista without the company's knowledge. Recovery began long after these leaks. Has U.S. Environmental Protection Agency considered that the cone of depression may be irrelevant in this instance?

In conjunction with the recovery activities underway at PPG, CONDEA-Vista, and Conoco Docks, the U.S. Environmental Protection Agency is evaluating the potential impact the ethylene dichloride plume may have on the Chicot aquifer. The cone of depression is very relevant in evaluating the potential impacts of the ethylene dichloride plume on the Chicot Aquifer and successful cleanup of Ethylene dichloride. The cone of depression, an energy gradient that drives water toward all ground water production wells pumping within the Chicot Aquifer, dictates where the water is moving and how fast. Because of this, the cone of depression influences the movement of ethylene dichloride. The cone of depression also comes into play when determining whether ethylene dichloride may contaminate the Mossville water supply wells or whether ethylene dichloride may migrate to irrigation wells in Iowa. These cones of depression have created hydraulic gradients which otherwise would not have existed in their current forms. Because the hydraulic gradients influence the vertical migration of ethylene dichloride, a hydrologic evaluation of the subsurface above and within the Chicot Aquifer must consider the cone(s) of depression.

Fisherville

69. What is being done to clean up the ground water contamination in the Fisherville community of perchlorethylene from the PPG railcar?

The U.S. Environmental Protection Agency's preliminary investigation has not identified any private drinking water wells in the immediate area which may be impacted by the ground water contamination. Thus, direct exposure to perchlorethylene contamination from ground water is unlikely.

The Union Pacific Railroad Company recently completed a series of tests of existing and new ground water wells in the area. The results of these tests are expected by September 1999. The Union Pacific's plan for further ground water cleanup will be submitted to Louisiana Department of Environmental Quality for review and approval. Remediation of contaminated ground water can require as many as thirty years to complete. Therefore, the residents of Fisherville should be prepared for a long-term cleanup process.

70. What can the U.S. Environmental Protection Agency do about the tank cars in the Union Pacific rail yard?

The U.S. Environmental Protection Agency has no jurisdiction over management of tank cars in the Union Pacific rail yard. The Federal Highway Administration in the Department of Transportation regulates railcar storage and transportation. Any complaints or concerns regarding the operation of railcars may be referred to either Union Pacific or Federal Housing Administration. The point of contact at Federal Housing Administration is Mr. Ron Havelaar. He can be reached at (817) 978-4388.

71. What information does the U.S. Environmental Protection Agency have regarding the 1983 Union Pacific tank car spill in Fisherville? There are bad odors day and night from this spill. Is our drinking water contaminated as a result of this spill?

On April 20, 1983, approximately 12,000 gallons of perchlorethylene was spilled from a tank car at the former Southern Pacific Rail yard. About 8,800 gallons of liquid perchlorethylene were recovered by PPG Industries, Inc. and Southern Pacific Railroad Company, and 6,052 cubic yards of perchlorethylene-contaminated soil and debris were removed. The unrecovered portion of the spill remained in place and monitoring indicates that the perchlorethylene-contaminated ground water plume has grown over the years.

Odors may or may not be related to the perchlorethylene contamination. The U.S. Environmental Protection Agency referred this concern to Louisiana Department of Environmental Quality for further investigation.

The U.S. Environmental Protection Agency's preliminary investigation has not identified any private drinking water wells in the immediate area which may be impacted by the ground water contamination. Thus, direct exposure to perchlorethylene contamination from ground water is unlikely.

Calcasieu Parish

72. Whom can I call if I have concerns about rail cars or railroad tracks?

The Department of Transportation is the Federal agency which regulates railcar storage and transportation in the Union Pacific Rail Yard. Any complaints regarding the operation of the rail yard to include unusual or unsafe activities or unusual odors may be referred to this agency. Please contact Mr. James Duncan, Federal Railroad Administration, 9088 Shadow Bluff Ave., Denham Springs, LA 70726, at (225) 667-8428 or fax number (225) 667-9050.

73. Who decides whether or not an evacuation is needed?

The decision to order evacuations or issue shelter in place lies solely with the Local Emergency Planning Committee according to the Emergency Planning and Community Right-to-Know Act of 1986. The Local Emergency Planning Committee has the responsibility to facilitate preparation and implementation of emergency plans. For any questions regarding the need for an evacuation or about the Calcasieu Parish area emergency plan, contact Mr. Richard Gremillion, Secretary/Treasurer of the Local Emergency Planning Committee, P.O. Box 1391, Lake Charles, LA 70601 or call (318) 437-3512

74. Can PPG Industries, Inc. continue to operate its polychlorinated biphenyls incinerator while the U.S. Environmental Protection Agency is considering its reauthorization?

The U.S. Environmental Protection Agency is required to process approval requests from companies that incinerate polychlorinated biphenyls in amounts more than 50 parts per million in their waste streams. Since PPG Industries, Inc. requested reauthorization within the required time frames (one year before expiration of its existing authorization), the facility may continue to operate until U.S. Environmental Protection Agency reissues a new approval.

75. How is the U.S. Environmental Protection Agency going to work with the community on all the concerns about the industries in the Calcasieu Parish?

The U.S. Environmental Protection Agency has committed to meet with CLEAN and other citizens four times over a period of a year. The Louisiana Department of Environmental Quality has agreed to participate in these meetings according to Mr. Dale Givens, Secretary of Louisiana Department of Environmental Quality. The first CLEAN meeting was held on March 23, 1999, at the Lake Charles City Council Chambers. The second quarterly meeting was held June 30, 1999, in Lake Charles.

76. The community is concerned that people routinely fish and swim in the local water bodies. Why haven't signs been posted for health advisories? Fishing from the bank of the Calcasieu River in close proximity to the North Ryan Street Site is a regular occurrence. Why hasn't the U.S. Environmental Protection Agency posted signs warning people of the hazards of fishing there?

The water body next to the North Ryan Street Site is owned by the city of Lake Charles and patrolled to discourage fishing and dumping in this area. Based on citizen concern, the U.S.

Environmental Protection Agency posted warning signs along River Road adjacent to the Site on December 29, 1998. Regarding the remainder of the local water bodies, the data available does not support posting warning signs according to the Louisiana Department of Environmental Quality and the Louisiana Department of Health and Hospitals.

State and Federal

77. What is the status of Louisiana Department of Environmental Quality's penalty policy?

The State civil penalty policy was finalized April 20, 1999. The promulgated regulations, Civil Penalty Assessment, LAC 33:1, can be found on the Internet at http://www.deq.state.la.us/planning/regs/addition/addto99.htm.

78. What is the Louisiana Department of Environmental Quality's responsibility when there is a violation of ambient air standards?

If there is a violation of health based standards, the State's first responsibility is to identify the cause of the violation and whether the violation can be remedied by enforcement of existing regulations and permits. If this is not successful, then U.S. Environmental Protection Agency can take either of two actions. First, U.S. Environmental Protection Agency can notify the Governor to begin the process to redesignate the area to nonattainment. With the nonattainment designation, the State is then required to develop a State Implementation Plan revision. Second, rather than redesignate to nonattainment, the U.S. Environmental Protection Agency can notify the Governor of the inadequacy of their current State Implementation Plan and require the State to develop a State Implementation Plan revision to address the violation. In either case, the State Implementation Plan revision would include a strategy for attaining the National Ambient Air Quality Standards with regulations to achieve the needed air pollution reductions.

The Clean Air Act requires the State to provide for public participation in the State Implementation Plan process. Citizens can participate in stakeholder groups working on the State Implementation Plan development and comment during public hearings and comment periods.

79. Will the Louisiana Department of Environmental Quality enforce its air toxic standards? What can citizens do without Federal oversight?

State regulations require large industrial complexes to reduce emissions of 100 air toxics below a level that would cause harm to citizens. Each industrial site should have submitted a plan to

Louisiana Department of Environmental Quality for approval and inclusion into the Title V Operating Permit. A violation of the facility's plan would be a violation of State regulations.

Each facility has submitted applications for Operating Permits to the State. Some permits have been issued, but many remain to be processed. Citizens may ask the facility or the State for copies of the applications or permits. Citizens have the right to request action from the State or the Region if they disagree with the proposed permit.

80. What are the U.S. Environmental Protection Agency's criteria to withdraw primacy or authorization from the Louisiana Department of Environmental Quality for delegated programs? What is the petition process?

The U.S. Environmental Protection Agency must show that State rules do not reflect Federal rules or that State implementation does not follow the Federal rules. The U.S. Environmental Protection Agency would have to notify the State that the rules or its implementation is inappropriate, and the State would have a time period to show their program is appropriate. If the U.S. Environmental Protection Agency is not satisfied, then the program could be withdrawn. Criteria for the process to withdraw approval of the Louisiana Pollutant Discharge Elimination System Program under the Clean Water Act are found at 40 CFR 123, Subpart D, 123.63-64.

The petition process for the Title V operating permits program is on a permit by permit basis, rather than for the entire State permit program. As outlined in 40 CFR 70, a permit is published for public and U.S. Environmental Protection Agency comment. After the U.S. Environmental Protection Agency 45-day review, if U.S. Environmental Protection Agency does not object to the permit, the public has 60 days to petition the Administrator to object to the permit. The Administrator has to decide whether to accept the petition. If the petition is accepted, the U.S. Environmental Protection Agency notifies the State of its objection to the permit. The State has 90 days to respond to the Administrator. The permit is either changed by the State or, if the State does not change the permit, changed by the U.S. Environmental Protection Agency. The Resource Conservation and Recovery Act criteria are listed in 40 CFR 271.22. Criteria are also listed in the Resource Conservation and Recovery Act statute at 3006(e).

81. How can the hydrology study from the USGS be accessed? Is it available to the public?

The USGS publications can be obtained from the local office in Baton Rouge by contacting Mr. John Lovelace at (225) 389-0281, extension 3210. The following USGS publications are available at the McNeese State University library in Lake Charles:

- "Geohydrology and the Occurrence of Selected Chemical Contaminants at a Hazardous Waste Disposal Site, Calcasieu Parish, Louisiana, 1984-1985; Water Resources Technical

Paper No 53," by US Department of Interior, USGS, in Cooperation with the Louisiana Department of Transportation and Development.

- "Distribution of Salt Water in the Chicot Aquifer System in the Calcasieu Parish Area, Louisiana, 1995-1996, Technical Report No. 62," by US Department of Interior, USGS, in Cooperation with the Louisiana Department of Transportation and Development.

- "Aquifer Management Strategy For The 'Chicot Aquifer', November 30, 1990, by McNeese State University; Final report to Louisiana Board of Regents, LEQSF (86-89)-RD-D-12.," Investigators James N. Beck , H. Edward Murray, Dale J. Nyman, Gerald J. Ramelow, Gunar N.S. Rao, and John C. Young.

82. What is the U.S. Environmental Protection Agency going to do about the dioxin contamination in the fish, sediments, and people of Calcasieu Parish?

The U.S. Environmental Protection Agency will sample for dioxin and other dioxin-like compounds in sediments and fish tissue as part of its Superfund investigation. The U.S. Environmental Protection Agency will coordinate this work with the State and Federal health agencies. In addition, the U.S. Environmental Protection Agency is working with the Agency for Toxic Substances and Disease Registry and the Louisiana Department of Health and Hospitals to evaluate whether the levels of dioxin found in the Mossville community are at levels of concern and to determine the source of the dioxin. Since more than 90 percent of the dioxin that peoples accumulate in their bodies generally comes from diet, follow-up interviews with the participants of the dioxin study may shed light on additional areas for testing.

83. Why did the government allow contamination to occur in the Calcasieu Parish? What is the environmental condition of the area today compared to the past?

Growing public concern with the environment nation wide during the 1950's and 1960's essentially gave rise to the U.S. Environmental Protection Agency and the creation of Federal environmental laws. To some degree, contamination of the Calcasieu Estuary occurred over a number of years as a result of past industrial practices and well before the creation of Federal environmental agencies and laws.

Available data shows that pollutant levels to include dioxin, polychlorinated biphenyls, lead, mercury and pesticides are decreasing in both humans and the environment. Over the years, improved technology, tighter regulatory controls, and a better scientific understanding of fate and transport have worked together to improve environmental conditions in air, land, and water. Still more progress is needed as some environmental contamination continues to occur. Where violations are discovered and provable, enforcement action is taken. Improved surveillance, especially monitoring, is still needed to detect violations. Some monitoring improvements are taking place as new operating permits are being issued and more focused environmental monitoring is taking place.

84. How do I get copies of reports and other information from the U.S. Environmental Protection Agency under the Freedom of Information Act?

Mail your request for information along with your name, address, and phone number to the following address. If you have any question, contact Ms. Jerva Durham (6MD-II), Freedom of Information Act Officer, Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, TX 75202, or at (214) 665-6597.

85. Who oversees the industries across the bridge?

The Louisiana Department of Environmental Quality oversees all industries within the State relating to state managed environmental programs.

86. A local telephone poll conducted on February 13, 1998, revealed that 80% of Lake Charles residents don't have the confidence in the Louisiana Department of Environmental Quality to protect public health. When will the U.S. Environmental Protection Agency take back permitting authority and begin cleanup and enforcement?

Federal laws establish the process for states to acquire the major responsibility for environmental programs. The State of Louisiana recognizes that many citizens are not happy with the way it is running its environmental programs. To address these concerns, the State has increased its level of oversight on all environmental permitting, cleanup activities, and enforcement programs. State environmental officials are also taking an active role in public meetings such as the Calcasieu Estuary Open House held on June 10, 1999, and quarterly CLEAN meetings held on March 23 and June 30, 1999. The U.S. Environmental Protection Agency aims to strengthen the effectiveness of environmental programs by working with State environmental agencies and the public. At this time, there is no basis for program withdrawal.

87. Will U.S. Environmental Protection Agency look at a buffer zone for industries and communities?

There is no specific requirement in either the Clean Air Act or the Resource Conservation and Recovery Act for a buffer zone. However, the requirements of certain programs, such as the Accidental Release Prevention Program required under Section 112(r) of the Clean Air Act, may indirectly encourage the consideration of buffer zones. In that program, the facility must evaluate a worst-case accidental chemical release scenario and develop a plan to prevent and mitigate such an event. The existence of a buffer zone and the extent of that buffer zone may impact the plan requirements.

88. Why will the U.S. Environmental Protection Agency allow new sources of pollution to continue to add to the existing pollution problems?

Regulatory agencies must issue permits and allow construction of new facilities that meet applicable requirements. In certain cases, the applicable requirements do not address

cumulative risks. In other cases, the laws are designed to allow new business development provided there is an overall reduction in emissions. For example, in areas that do not attain National Ambient Air Quality Standards, new sources may construct only if they obtain an offset which is greater than the total of new emissions that will result from the new construction. Many facilities are obtaining offsets by shutting down older, higher polluting units and replacing them with newer, cleaner units.

89. Will U.S. Environmental Protection Agency take another look at the PPG Mercury Retort Furnace Burner?

The U.S. Environmental Protection Agency does not plan to conduct additional testing of the PPG Mercury Retort Furnace. Because this unit is a Resource Conservation and Recovery Act exempt BIF unit, U.S. Environmental Protection Agency has no authority to require testing. However, nonexempt units which are up for permit renewal will undergo a comprehensive trial burn evaluation before permits are renewed.

90. I live close to the CECOS facility in the Calcasieu Parish and am concerned that the contaminated plume has migrated beneath my property. Will the U.S. Environmental Protection Agency drill a monitoring well on my property?

Since existing contamination appears to be contained above the Chicot Aquifer, additional off-site wells in this area are not planned. Ground water monitoring wells already exist for the 50-foot and 200-foot zones on all sides of the CECOS-Calcasieu (Willow Springs) facility to address off-site contamination in the 50-foot zone in the northeast corner and south of the facility. The CECOS recovery system includes 20 ground water recovery wells to hydraulically control contaminated ground water and 96 monitoring wells to ensure performance of the system. There are several 200-foot zone monitoring wells and one 500-foot well. Ethylene dichloride has not been measured in any of these wells.

91. Does pump and treat really work as a ground water cleanup technology? Where has it been successfully used?

Yes, pump and treat is a proven ground water remediation technology. The effectiveness of pumping and treating contaminated ground water, of course, depends on the specific site characteristics and contaminants. Pump and treat technology has been used successfully in the Superfund and Resource Conservation and Recovery Act programs. There are many facilities across the United States where this technology has been applied successfully. In Louisiana, for example, it is being used at PPG in Lake Charles, at American Creosote Superfund Site in Winnfield, and at Petro Processors Superfund Site near Scotlandville. It is in the pilot stage at CONDEA-Vista in Mossville and at the Highway 71/72 Superfund Site in Bossier City. For more information on pump and treat technologies, visit the U.S. Environmental Protection Agency Website at URL http://www.epa.gov/ordntrnt/ORD/WebPubs/pumptreat.